

Title (en)
SEISMIC PULSE GENERATION

Publication
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Application
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Priority
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Abstract (en)
[origin: EP0238736A1] A seismic acoustic source for generating acoustic pulses in both solid rock and sedimentary layers on land and in both water, rock and sedimentary layers at sea comprises:- two chambers; a high pressure chamber (1) and a low pressure chamber (2) communicating but separated from each other by, for example, a first diaphragm, (3) the low pressure chamber (2) being closed by, for example, a second diaphragm (4). The high pressure chamber (1) contains gas e.g. helium at high pressure whereas low pressure chamber (2) contains a gas such as carbon dioxide at a lower pressure. The pulse is generated by bursting the diaphragm (3) separating the two chambers whereupon the shock wave generated in the carbon dioxide then travels to the other end of the low pressure chamber (2) and leaves by over-pressure behind the shock bursting the second diaphragm. Repetitive operation may be achieved by replacing the first diaphragm (1) with a shock wave valve and the second (2) with operable valve means such as an iris diaphragm or full-bore gate valve.

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G01V 1/137

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Cited by
FR2672964A1; CN116559936A; EP3223041A1; US10476604B2; US10139503B2; US10401511B2; WO2017019186A1; EP3223041B1

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